

ECOLOGICAL CHARACTERISTICS AND IMPORTANCE OF ORNAMENTAL  
FLOWERING CHINESE WISTERIA (*WISTERIA SINENSIS*) IN THE CONDITIONS OF  
SURXONDARYO REGION AND VERTICAL LANDSCAPING

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**ABSTRACT**

This article examines in detail the role of the following species of ornamental flowering vines introduced to Uzbekistan: Chinese wisteria - *Wisteria sinensis*, in vertical landscaping in government agencies, residential areas, office buildings, as well as in the city of Termez and the Termez district of the Surkhandarya region. During my research, I described in detail the ornamental properties of these plants and their role in ecology, the environment and landscape design.

**Keywords :** *Research. Chinese wisteria, Wisteria Sinensis, Surkhandarya region, Termez city, Breeding technology, Bioecology.*

**Chinese Wisteria - ( *Wisteria Sinensis* ) Bioecology and Landscape Characteristics**

The introduction of moratoriums on the cultivation of plants, the reproduction of trees and shrubs, the increase in the mass of green energy, and the cutting of trees and shrubs in our country will greatly contribute to improving the ecology of our country. The greatest attention to this area is clearly reflected in the resolutions of our President and the resolutions of the Cabinet of Ministers.

The 80th goal of the “New Development Strategy of Uzbekistan for 2022-2026” in the direction of “Approaching global problems based on national interests” in the Decree of the President of the Republic of Uzbekistan No. PF-60 dated January 28, 2022: “The goal of protecting ecology and the environment, improving the ecological situation in cities and districts is also the result of major changes being made in the implementation of the “Green Space” national project.

The Cabinet of Ministers adopted a resolution "On further improving the procedure for planting, caring for and using trees and shrubs that are not included in the State Forest Fund."

According to the document, for each cut tree and shrub, there is an obligation to plant 10 large-sized seedlings of no less valuable than the trees and shrubs to be cut down as compensation and to maintain them for at least two years, as well as to plant 100 seedlings for illegally cut trees and shrubs, subject to maintenance for three years.

**Chinese Wisteria - ( *Wisteria Sinensis* ).** *Wisteria* (*Wisteria*) occupies the first place among the most beautiful flowering plants. Its graceful, cascade-like inflorescences, pleasant, sweet aroma captivate a person. After seeing this wonderful flowering plant ("live" or in the photo), everyone tries to grow this plant in their garden

The Latin name of wisteria is associated with the name of the American scientist Caspar Wistara. Chinese wisteria **is a plant belonging to the *Fabaceae* family**, which also includes the well-known genera *Bunduk*, *Bagryanik*, *Sophora*, and *Acacia*. Chinese wisteria belongs to the *Wisteria* genus,

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which is one of the most common species of Chinese and Japanese wisteria. Wisteria or Wisteria is a highly ornamental liana. There are 9 species of the Wisteria genus. However, only a few species are used in ornamental gardening and landscaping. It grows up to 20 meters in height, the length of the inflorescence is up to 30 cm. The simultaneous opening of flowers in the inflorescence creates a unique beauty. It blooms all summer, some forms bloom until September-October. It withstands frosts down to  $-20^{\circ}\text{C}$ . It likes light and heat. It is mainly propagated vegetatively. In addition to open ground and vertical gardening, this species is also cultivated as a Bonsai plant in China and Japan. Chinese wisteria is naturally distributed in mountain forests in central and eastern China at an altitude of 500-1800 m above sea level. Chinese wisteria is distributed in Anhui, Fujian, Guangxi, Hebei, Henan, Hubei, Jiangsu, Jiangxi, Shaanxi, Shanxi and Shandong provinces, and Japanese wisteria is distributed in Japan.

Wisteria is propagated vegetatively. Seed propagation is less effective. Young plants lose some of their varietal characteristics. In addition, some of the sprouted and even grown seedlings may never flower. The period from seed sowing to flowering can last up to 10 years ( Figure 1 ) .



1. The importance of ornamental flowering Chinese Wisteria in vertical landscaping.



Figure 2. Winter and summer growth period of the Chinese Wisteria mother plant (Andijan region, Andijan city, February and August 2024).

Table 1

Scale for evaluating the ornamental qualities of the ornamental flowering Chinese Wisteria

No.	Landscape characteristics of shrubs	Maximum score
1	Height	6
2	The shape of the horn	4
3	Density of hornbeam	6
4	Branch color	3
5	Seasonal leaf color	4
6	Flowering landscape	20
7	Flowering duration	10
8	Fruit color and size	10
9	Long-term storage of fruit on the bush	4
10	Leaf fall storage period	5
11	The period of preservation of the bush's decorativeness	5
	<b>Total:</b>	<b>77</b>

Table 2

Phenophases of ornamental shrubs in the mother collection (February and December 2024)

Uzbek, Latin, The	The growth of buds	Leaf development	Flowering	Fruit (seed) ripening and ripening	Growt h on a
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1	2												branch	
		Exaggeration	Opening.	New one formation	Leaves appear to be	Total leaf appearance	Flowering beginning	End of flowering	Flowering rate	End of ripening	The beginning of the spill	End of the spill	Productivity king	Beginning
3	4	5	6	7	8	9	10	11	12	13	14	15		
Chinese Wisteria	20. I II	25 .III	29.III	2.V	11.IV	20.IV	1. V	15.V	4 good	20 .X I	25 .X I	1 .X II	3 medium	23.I II

There are about ten varieties of Chinese Wisteria , but the following varieties are most common in parks, alleys, parks , arboretums and areas of urban significance . Let's consider some of the above varieties:

### CONCLUSION

One of the first experiments on the cultivation of Chinese wisteria, one of the ornamental flowering lianas, in the conditions of Surkhandarya region is being conducted. One of the main goals of this experiment is to show how Chinese wisteria, which grows and develops in countries such as Russia, China, Europe and the United States while maintaining its ornamental appearance, grows well in the cool and somewhat higher relative humidity regions of the Republic of Uzbekistan, such as Andijan region, Fergana region, Namangan region, Samarkand region, Tashkent city and Tashkent region, and does not lose its ornamental properties. In this case, the experiment is being conducted in the hottest region of our Republic, the Termez city and Termez district of Surkhandarya region, to what extent Chinese wisteria adapts to this region and grows and develops.

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